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| 09/925,976 | 08/09/2001 | Stephen Anthony McNulty | 34826-1007 | 4370 |

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EXAMINER

SMITHERS, MATTHEW

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,976

Applicant(s)

MCNULTY ET AL.

Examiner

Matthew B. Smithers

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/18/02;10/30/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on January 18, 2002 and October 30, 2003 were filed in compliance with the provisions of 37 CFR 1.97(b). Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-47 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 6,658,004 granted to Kadansky et al.

Regarding claim 1, Kadansky meets the claimed limitations as follows:

"A method carried out in a computer for providing periodic verification of the computer during requests from the computer to a second computer over a communications system, the method comprising:

establishing an authentication handshake with the second computer; and periodically sending messages to the second computer, wherein the second computer services the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 2, Kadansky meets the claimed limitations as follows:

"The method of Claim 1 wherein the authentication handshake comprises an exchange of a session key and a sequence value." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 3, Kadansky meets the claimed limitations as follows:

"The method of Claim 2 wherein the messages further comprise the session key and the sequence value." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 4, Kadansky meets the claimed limitations as follows:

"The method of Claim 3 wherein the session key and the sequence value are processed through a one-way hash function." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 5, Kadansky meets the claimed limitations as follows:

"The method of Claim 1 wherein the requests are to send data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 6, Kadansky meets the claimed limitations as follows:

"The method of Claim 1 wherein the requests are to receive data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 7, Kadansky meets the claimed limitations as follows:

"A method carried out in a computer for providing periodic verification of a second computer during requests from the second computer to the computer over a communications system, the method comprising:

establishing an authentication handshake with the second computer; periodically receiving messages from the second computer; and servicing the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 8, Kadansky meets the claimed limitations as follows:

"The method of Claim 7 wherein the authentication handshake comprises an exchange of a session key and a sequence value." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 9, Kadansky meets the claimed limitations as follows:

"The method of Claim 8 wherein the messages further comprise the session key and the sequence value." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 10, Kadansky meets the claimed limitations as follows:

"The method of Claim 9 wherein the session key and the sequence value are processed through a one-way hash function." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 11, Kadansky meets the claimed limitations as follows:

"The method of Claim 7 wherein the requests are to send data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 12, Kadansky meets the claimed limitations as follows:

"The method of Claim 7 wherein the requests are to receive data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Claims 13-18 are system claims that are substantially equivalent to method claims 1-6.

Therefore system claims 13-18 are rejected by a similar rationale.

Claims 19-24 are system claims that are substantially equivalent to method claims 7-12.

Therefore system claims 19-24 are rejected by a similar rationale.

Regarding claim 25, Kadansky meets the claimed limitations as follows:

"A method carried out in a computer for providing periodic verification of at least two second computers during requests from the at least two second computers to the computer over a communications system, the method comprising: establishing authentication handshakes with each of the at least two second computers; periodically receiving messages from the at least two second computers, wherein the messages are different from each other; and servicing the requests from the at least two second computers if their corresponding messages are valid and received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 26, Kadansky meets the claimed limitations as follows:

"The method of Claim 25 wherein the authentication handshakes comprise exchanges of at least two session keys and at least two sequence values." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 27, Kadansky meets the claimed limitations as follows:

"The method of Claim 26 wherein the messages further comprise the at least two session keys and the at least two sequence values." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 28, Kadansky meets the claimed limitations as follows:

"The method of Claim 27 wherein the at least two session keys and the at least two sequence values are processed through a one-way hash function." see column 5, lines 15-36 and Figures 8 and 9.

Regarding claim 29, Kadansky meets the claimed limitations as follows:

"The method of Claim 27 further comprising:

reading a table for information to use in determining expected messages for each of the at least two second computers, wherein the table includes identifiers associated with the at least two second computers, session keys associated with the at least two second computers, and sequence values associated with the at least two second computers; determining the expected messages for each of the at least two second computers; and validating that the expected messages for each of the at least two second computers are identical to each of their corresponding messages from the at least two second computers." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 30, Kadansky meets the claimed limitations as follows:

“A method carried out in a computer for providing periodic verification of the computer during requests from the computer to a second computer over a communications system, the method comprising: establishing an authentication handshake with the second computer, wherein the authentication handshake includes a session key and a sequence value; and periodically sending messages to the second computer, wherein the messages include the session key and the sequence value, wherein the second computer services the requests if the messages are valid and are received within a predetermined time interval.” see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Regarding claim 31, Kadansky meets the claimed limitations as follows:

“The method of Claim 30 wherein the requests are to send data.” see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 32, Kadansky meets the claimed limitations as follows:

“The method of Claim 30 wherein the requests are to receive data.” see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 33, Kadansky meets the claimed limitations as follows:

“A method carried out in a computer for providing periodic verification of the computer during requests from the computer to a second computer over a communications system, the method comprising: establishing an authentication handshake with the second computer, wherein the authentication handshake includes a session key and a sequence value; and periodically sending messages to the second computer, wherein

the messages include the session key and the sequence value which are processed through a one-way hash function, wherein the second computer services the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Regarding claim 34, Kadansky meets the claimed limitations as follows:

"The method of Claim 33 wherein the requests are to send data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 35, Kadansky meets the claimed limitations as follows:

"The method of Claim 33 wherein the requests are to receive data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 36, Kadansky meets the claimed limitations as follows:

"A method carried out in a computer for providing periodic verification of a second computer during requests from the second computer to the computer over a communications system, the method comprising:

establishing an authentication handshake with the second computer, wherein the authentication handshake includes a session key and a sequence value; periodically receiving messages from the second computer, wherein the messages include the session key and the sequence value; and servicing the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Regarding claim 37, Kadansky meets the claimed limitations as follows:

"The method of Claim 36 wherein the requests are to send data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 38, Kadansky meets the claimed limitations as follows:

"The method of Claim 36 wherein the requests are to receive data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 39, Kadansky meets the claimed limitations as follows:

"A method carried out in a computer for providing periodic verification of a second computer during requests from the second computer to the computer over a communications system, the method comprising:

establishing an authentication handshake with the second computer, wherein the authentication handshake includes a session key and a sequence value; periodically receiving messages from the second computer, wherein the messages include the session key and the sequence value which are processed through a one-way hash function; and servicing the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Regarding claim 40, Kadansky meets the claimed limitations as follows:

"The method of Claim 39 wherein the requests are to send data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Regarding claim 41, Kadansky meets the claimed limitations as follows:

"The method of Claim 39 wherein the requests are to receive data." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6 and 7.

Claim 42 is a computer-executable process stored on a computer readable medium claim that is substantially equivalent to method claim 33. Therefore computer-executable process stored on a computer readable medium claim 42 is rejected by a similar rationale.

Claims 43-45 are a computer-executable process stored on a computer readable medium claim that is substantially equivalent to method claims 7, 11 and 12. Therefore computer-executable process stored on a computer readable medium claims 43-45 are rejected by a similar rationale.

Regarding claim 46, Kadansky meets the claimed limitations as follows:

“A method carried out in an intelligent storage device for providing periodic verification of a computer during requests from the computer to the intelligent storage device over a communications system, the method comprising:

establishing an authentication handshake with the computer, wherein the authentication handshake includes a session key and a sequence value; periodically receiving messages from the computer, wherein the messages include the session key and the sequence value which are processed through a one-way hash function; and servicing the requests if the messages are valid and are received within a predetermined time interval.” see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Regarding claim 47, Kadansky meets the claimed limitations as follows:

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"A method carried out in a computer for providing periodic verification of the computer during requests from the computer to an intelligent storage device over a communications system, the method comprising:

establishing an authentication handshake with the intelligent storage device, wherein the authentication handshake includes a session key and a sequence value; and periodically sending messages to the intelligent storage device, wherein the messages include the session key and the sequence value which are processed through a one-way hash function, wherein the intelligent storage device services the requests if the messages are valid and are received within a predetermined time interval." see Abstract; column 4, line 43 to column 5, line 36; column 7, lines 3-63 and Figures 4, 5, 6, 7, 8 and 9.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Novaes (US 6,735,200) discloses a method for monitoring the availability of nodes in a communications network.


B. Jarosz (US 20001/0054158) discloses a communication between nodes where a heartbeat message is used to identify a failure within a node.

C. Luby et al. (US 2002/0129159) discloses a method for monitoring packets transmitted from a server to a variety of clients.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew T. Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew B Smithers
Primary Examiner
Art Unit 2137